

Core principles of photogrammetry

Image quality, Information overlap, Subject coverage

Very good guide: [Photogrammetry Basics](#)

Screenshots below were taken from this [Unreal Engine YouTube seminar](#)

Core Principles of Photogrammetry

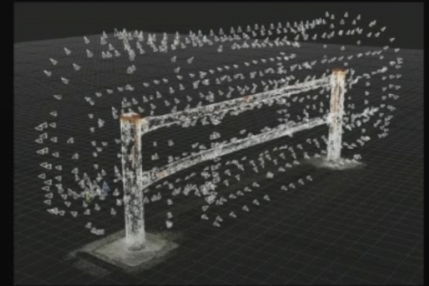
The three biggest considerations for scanning are:



Image quality



Information overlap



Subject coverage

Core Principles of Photogrammetry

Image quality

The first consideration, image quality. This means images must be sharp, in focus, with a deep depth of field, and without blur or digital noise.



Good



Blurry



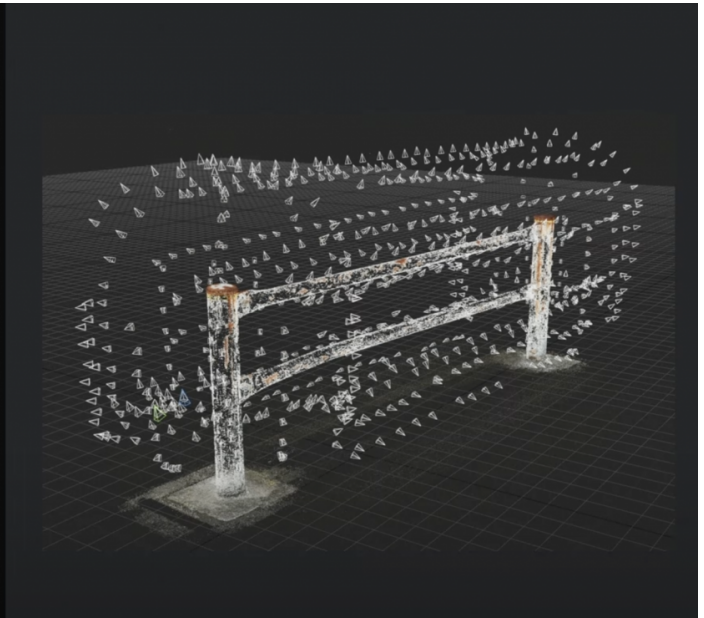
Noisy

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Subject coverage

For the computer to realize the subject, the entire subject must be captured within the set of images.

If there is a gap or missing information in the images, the computer cannot fill that gap. For this reason, many images are taken of the subject from differing angles to ensure 100% subject coverage within the images.

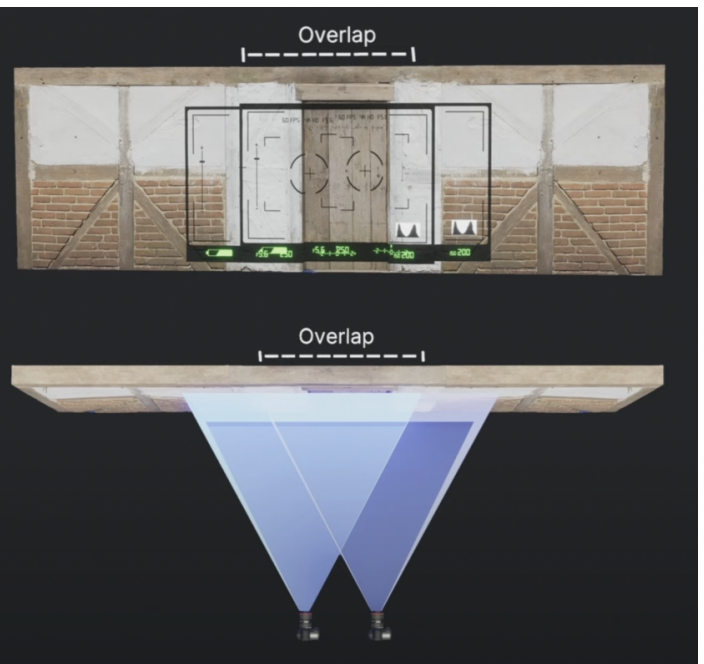


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Information overlap

For the computer to relate two images together, it compares color information from one image with color information from the other to determine how the images seam together.

The computer continues “folding” images in the set this way until the subject shape is fully formed digitally. To provide the computer with enough information to complete this task, scan images need to have approximately 70% overlap.



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